

DOE – Medical and Infectious Disease Update – Wednesday, May 12, 2004

DOE weekly updates on Bird Flu, Human Influenza, West Nile Virus, or other illnesses and medical issues will continue as appropriate or as requested. The following information is current as of Thursday, May 13, 2004, 0700 hours, EST. Information presented is routinely taken from the Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/>, The World Health Organization (WHO), <http://www.who.int/en/>, the Department of Defense Emerging Infections Surveillance and Response System site, (DoD-GEIS) - <http://www.geis.ha.osd.mil/>, and other creditable sources.

Recent News

ALLERGY-The Accuweather page provides current air quality information with specific charts for **Grass Pollen**, **Overall Pollen**, **Ragweed Pollen**, and **Tree Pollen** ...
http://www.accuweather.com/adcbn/public/maps_index.asp?type=airq.

Two more SARS patients discharged from hospital in Beijing (No new cases) – 12May2004, BEIJING, ([Xinhuanet](http://news.xinhuanet.com/english/2004-05/12/content_1465580.htm)) --The aunt of Beijing's first SARS patient Li and another female patient surnamed Xu have recovered from the infection and were discharged from Ditan Hospital of Beijing Wednesday. The aunt contracted SARS when taking care of her 20-year-old niece, who is a nurse in Beijing's Jiangong Hospital and the first confirmed case in Beijing last month. She and Li's parents were admitted to Ditan Hospital on April 22. Li was discharged from hospital on May 4 and her parents were discharged on Tuesday. Mao Yu, president of Ditan Hospital, said that they had fully recovered and met all the requirements set by the state for discharging SARS patients ...
http://news.xinhuanet.com/english/2004-05/12/content_1465580.htm.

Wisconsin Chemists Find A New Chink In TB's Armor - 10May2004, **Science Daily**, MADISON --The family of bacteria that causes tuberculosis (TB) and leprosy are notoriously sturdy. And although the diseases they cause have been held in check for the past 50 years by antibiotics, some strains are becoming increasingly resistant to existing therapy. Now, however, a new chink has been found in the cellular armor that makes these infectious diseases difficult to treat. The discovery, reported today (May 9) in the online editions of the journal *Nature Structural & Molecular Biology* by a team of chemists and biochemists from the University of Wisconsin-Madison, opens the door to the development of a new family of antibiotics to treat diseases that still claim as many as 3 million lives annually worldwide.
<http://www.sciencedaily.com/releases/2004/05/040510012438.htm>.

Herbal malaria drug is in demand: Health agencies switch from quinine derivatives - 10May2004, by Donald G. McNeil Jr., **Lexington Herald Leader** (NEW YORK TIMES NEWS SERVICE), UNITED NATIONS --After years of hesitation, world health agencies are racing to acquire 100 million doses of a Chinese herbal drug that has proved strikingly effective against malaria, one of the leading killers of the poor. The drug, artemisinin (pronounced are-TEM-is-in-in), is a compound based on qinghaosu, or sweet wormwood. First isolated in 1965 by Chinese military researchers, it cut the death rate by 97 percent in a malaria epidemic in Vietnam in the early 1990s. It is rapidly replacing quinine derivatives and later drugs, against which the disease has evolved resistant strains. To protect artemisinin from the same fate, it will be given as part of multidrug cock-tails. Until recently, the United States and Britain had opposed its use on a wide scale, saying it was too expensive, had not been tested enough on children, and was not needed in areas where other malaria drugs still worked ... <http://www.kentucky.com/mld/heraldleader/news/world/8630203.htm>.

Lack Energy? Maybe It's Your Magnesium Level – 10May2004, **Science Daily** --Most people think of calcium and phosphorus as the most important dietary components for bone health. But magnesium also plays an important role. It is involved in hundreds of biochemical reactions, many of which help keep not only bones strong, but the heart rhythm healthy and the nervous system functioning smoothly. A study by ARS physiologist Henry C. Lukaski and

nutritionist Forrest H. Nielsen reveals important findings on the effects of depleted body magnesium levels on energy metabolism. Lukaski is assistant director of ARS's Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota. He and Nielsen, with the center's clinical nutrition support staff, showed that inadequate magnesium is associated with a need for increased oxygen during exercise. They found that during moderate activity, those with low magnesium levels in muscle are likely to use more energy—and therefore to tire more quickly—than those with adequate levels ... <http://www.sciencedaily.com/releases/2004/05/040510011303.htm>.

Virology Lab Is Focus Of Latest SARS Outbreak In China -

10May2004, **Science Daily** --Investigation of the source of the current outbreak, first reported on 22 April, continues to focus on the National Institute of Virology in Beijing. The institute is known to have conducted experiments using the live SARS coronavirus during February and March ...

<http://www.sciencedaily.com/releases/2004/05/040510020956.htm>.

Novel Pill Helps Older People With Insomnia –

6May2004, *by Charlene Laino*, **WebMD** (New York City) -- A new medication can help the millions of elderly people who toss and turn all night long to sleep more soundly, new research shows. In a study of more than 250 older people with insomnia, the new sleeping pill, called Estorra, significantly reduced the amount of time they lie awake in bed, reports W. Vaughn McCall, MD, professor and chairman of the department of psychiatry and behavioral medicine at Wake Forest University Baptist Medical Center in Winston-Salem, N.C. The experimental drug, which slows brain metabolism and activity, also helped elderly people with insomnia fall asleep faster and cut down on daytime drowsiness, he says. But the big benefit is its ability to prevent people from waking up once they have gone to bed, McCall tells WebMD ... <http://dailynews.att.net/cgi-bin/news?e=pri&dt=040506&cat=news&st=news99160&src=webmd>.

U.S. Tracking Down Labs That Study SARS Virus -

6May2004, *by Maggie Fox*, Health and Science Correspondent, WASHINGTON (**Reuters**) --Concerned about a SARS outbreak traced to labs in Asia studying the virus, **U.S. health officials said on Wednesday they were checking across the country to see which facilities have samples of the virus.** Dozens of U.S. laboratories testing the sometimes deadly virus will be reminded of safe procedures for handling it, said Tom Skinner, spokesman for the U.S. Centers for Disease Control and Prevention. "We will be taking additional steps to learn more about the labs that do have this to make sure they know about the steps to take to ensure they have the necessary information and safety protocols in place," Skinner said in a telephone interview ... <http://www.reuters.co.uk/newsArticle.jhtml?type=healthNews&storyID=5052731§ion=news>.

SARS may be spread by sweat –

4May2004, **Science Daily** --Chinese scientists have found the SARS virus in the sweat glands of people killed by the infection in southern China in 2003, raising the possibility that if it breaks out again, the virus might spread simply by touch. In a separate development, an investigation in Beijing into the latest laboratory escape of SARS has revealed that neither of the researchers infected actually worked with the live virus. This suggests it is capable of spreading unsuspected in a lab, and that research centres may now be the most likely source of a future outbreak. Such a prospect is particularly worrying given that no-one knows how many labs now hold the SARS virus ... <http://www.newscientist.com/news/news.jsp?id=ns99994971>.

Bird Flu 2003-2004: Doe Special Medical Update –

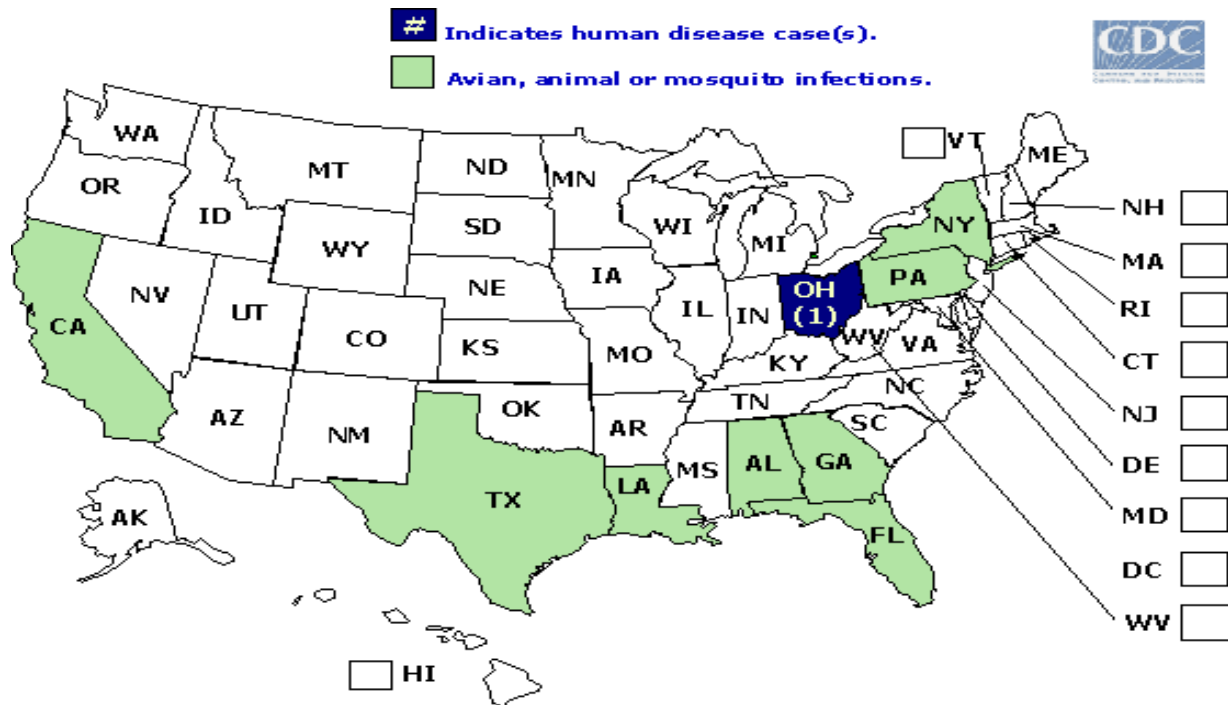
With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic "drift", and antigenic "shift" ... http://www.eh.doe.gov/health/news/BI RDFLU2003-2004_DOESPECIALUPDATE_B200402091.pdf (PDF) or for a choice of PDF or Word format, <http://www.eh.doe.gov/health/index.html>, and scroll down under "News and Features".

WHO: Avian influenza -fact sheet –

5January2004-Avian influenza ("bird flu") and the significance of its transmission to humans ... http://www.who.int/csr/don/2004_01_15/en/.

CDC. [Maps](#) reporting WNV avian and veterinary activity occurring during 2004 are updated regularly. Human disease cases have been reported in Ohio.

2004 West Nile Virus Activity in the United States (reported to CDC as of May 5, 2004*)



*Currently, WNV maps are updated regularly to reflect surveillance reports released by state and local health departments to the CDC Arbonet system for public distribution. Map shows the distribution of avian, animal, or mosquito infection occurring during 2004 with number of human cases, by state. If West Nile virus infection is reported to CDC Arbonet in any area of a state, that entire state is shaded accordingly.

<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

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